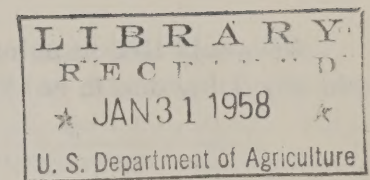


**CHRYSANTHEMUMS**

New additions and procurements for Spring 1958

Cuttings of these varieties  
will be available for shipment  
May 12, 1958

Yoder Brothers, Inc.  
Barberton, Ohio

## NEW VARIETIES - GROWER'S AGREEMENTS

The sale of cuttings of a majority of the varieties listed here as Introductions for 1958 will be subject to limitations generally referred to as "grower's agreements".

These forms will be available for customer's signature sometime after January 1, 1958, so that there will be plenty of time for their return to us before cuttings are available for shipment.

We would like to point out the importance of booking orders early, however, so as to avoid any delay due to not having agreements signed in advance.

\* \* \* \* \*

### Prices

All prices are per 100 cuttings, except the first column on the left.  
Fifty cuttings are priced per 50.

<u>Price Class</u>	<u>50 only</u>	<u>100 - 250</u>	<u>300 - 450</u>	<u>500 - 950</u>	<u>1000 - Up</u>
S-1	4.25	8.25	8.00	7.75	7.50
P	4.50	8.75	8.50	8.25	8.00

\* \* \* \* \*

### Our Selections, Collections, etc.

Upon request, we shall be glad to make the selection of varieties for any given order. Varieties selected will be billed at regular catalog prices.

- ANDANTE**  
(9-week response) Oct. 25 (DePetris) - Intermediate decorative disbud. Apricot - bronze. Habit well adapted to pots from mid April thru October. MEDIUM TREATMENT. A valuable improvement over Mrs. DuPont as a spring pot. Its superb color remains serenely smooth under both cool and warm finishing temperatures. P
- BAYONNE (MAJESTIC)**  
(8-week response) Oct. 20 (DePetris) - Intermediate incurved disbud. Warm orange-bronze color with coral overtones. Recommended exclusively for pots, SHORT TREATMENT, from early April thru October. Short and spreading habit with prolific breaking action. Attractive foliage. Quality, appeal, and dependable performance results in one of the best early bronzes for pots bred to date. P
- BRIGHTON YELLOW**  
(9-week response) Oct. 25 - Large incurved standard mvm. Intense golden yellow. Of English origin. Early and efficient for its short duration of use both as a standard and fast disbud from mid April thru June. Variety crowns prematurely when grown in high temperature environments. Shares no equal for color and size in its response group. A spring variety with speed and vigor. P
- BRILLIANCY**  
(9-week response) Nov. 1 (Y.B.) - An Aztec yellow intermediate single contrasted with accenting green discs. Recognized for rigid stems, a well balanced spray formation, superb flower placement and uniform response throughout its season of use. Grow as a natural spray in greenhouse from May thru mid November. A daisy of substance with distinctive class and productive capacity. P
- BR. JUBILATION**  
(11-week response) Nov. 15 (Y.B.) - Large pompon. A rosewood-bronze sport of Jubilation. Equal in all respects, other than color, to its parent variety. A finishing temperature of 60° or less is required for maximum color retention. A real performer for October thru mid May greenhouse programs as well as late September and October cloth houses. The Jubilations efficiently contribute needed vigor for northern winter pom programs. They will tolerate lower bud initiation temperatures of 56-60° with uniform response. P
- BRONZE PORTRAIT**  
(10-week response) Nov. 8 (Rosacker) - Intense, reddish-bronze pom. A Samovar color addition to the ever-widening Portrait series. Similar growth habits and same degree of vigor as parent. Less tolerant to high finishing temperatures for color retention. Useful in greenhouse spray program from March thru mid June and again from late September thru mid November. Pots: late September thru February using MEDIUM TREATMENT and March thru May TALL TREATMENT. P

- BUNBU. Nov. 1 - Large, fully double, spooned tip spider. Medium lavender pink color. Tall vigorous habit with rigid stems. Extreme vigor permits the reduction of one long day week from the 9-week schedule. Is a dependable performer in either the standard or fast disbud program from April thru November. Bunbu possesses traits superior to those of Mary Garden and at the same time makes a fine companion for Luyona in any program. Often requires some shade protection during the finishing period to prevent petal tip burn. S-1
- (9-week response)
- CAMILLE BAUMANN Nov. 3 (Baumann) - Medium to large single disbud. White spindle on tubular ray petals. Novel form that will enrich variation in fast disbud programs from April thru mid December. Never fails to grow vigorously, respond uniformly, and flower on rigid stems. Especially valuable to retail growers who are seeking new and unusual beauty. High summer temperatures contribute to some size reduction. P
- (9-week response)
- CANDYTUFT Oct. 15 (Y.B.) - Lavender-pink button pom. Short, well-branched growth habit. Produces a greater mass of small durable blooms than Masquerade, either as an early spring pot plant from May thru June, and October with MEDIUM TREATMENTS or as a natural flowering garden specimen. P
- (8-week response)
- CELEBRITY Nov. 23 (Y.B.) - Intermediate decorative. Color is a discriminating shell pink. Objectively bred and selected for a larger sized flower and a more lucidly clear pink color than Almega provides. Substantially increased vigor renders this a real prize for greenhouse sprays from mid October thru mid April. Production competes favorably with any outstanding late variety for winter flowering in the north. Maximum color needs a cool 60° finish. Flower size may be enlarged by partial disspray. P
- (11-week response)
- CHALK CLIFF Nov. 10 (Y.B.) - Large chalk white decorative pom. The answer to a white Portrait for pots the year round, using MEDIUM TREATMENT. Foliage, habit, and flower form provide a striking resemblance. Somewhat larger than Portrait, its heavily petalled flower contributes to a very fresh appearance with extended keeping qualities. Also has a more vigorous breaking habit. A versatile and beautiful white that will pay its way in any pot plant program. P
- (10-week response)
- CHEERFUL Nov. 12 (Y.B.) - Intermediate natural spray pom. Lavender pink with tone on tone contrast. Best described as a "Delmar" flower on a "Delight" chassis. Recommended in the greenhouse spray program from mid April thru mid December. An easy variety to cut and handle. Sprays usually terminal. Summer finishing temperatures above 80° may dull color contrast. Ideal for air-cooled houses. Always responsively dependable. It has class and quality, radiantly cheerful. P
- (10-week response)

- CREST  
(9-week response) Oct. 25 (Univ. of Montana) - Medium sized formal pom disbud. Ivory white with cream centers. Its dwarf habit makes it a first class pot variety for mid March thru mid November MEDIUM TREATMENT. A relatively fool-proof pot variety during high light intensity periods of the year. Far more efficient than Granite State and will easily average 5 breaks per plant, much like Bonnaffon. Intolerant of winter low light environments. P
- CRYSTALLITE  
(9-week response) Oct. 25 (Y.B.) - Intermediate formal pompon. Paper-white. Responds earlier than Keepsake or Igloo under high temperature summer conditions. Does not tolerate low temperatures for initiation. Response is uniform and rapid at 60° or over. A high caliber and efficient variety from May thru mid November as a natural spray in the greenhouse. P
- DARKCHIP  
(9-week response) Nov. 1 (Krueger) - Intermediate dark lavender pink sport of Bluechip. Color similar to that of Pennant but brighter. In the spring months, growth is normally 3-4" taller than Bluechip and 3-4 days later to flower. Can be flowered whenever Bluechip is grown, May thru mid November as a greenhouse spray. Like all the rest of the Bluechip sports, the color becomes enhancingly luminous under normal incandescent light. P
- DAYBREAK  
(10-week response) Nov. 10 (Y.B.) - A bright and lustrous orange anemone disbud. Attains 4-5" diameters with a large and well-rounded cushion. A uniquely different and tasteful color for fast disbud programs from late March thru mid November. Color remains smooth under high temperature finishes although intensity may be reduced. A true Designers Delight. P
- DESIRE  
(12-week response) Nov. 25 (Y.B.) - Intermediate anemone. Delicately colored light pink. High crowned cushions. A forerunner to faster, and more efficient winter varieties for northern greenhouses. When grown as a natural spray this performs more advantageously on the fast disbud time schedule than it does on the regular greenhouse spray schedule. Excessive long day weeks on the regular schedule promotes early crowning and consequently overcropping. Recommended as a fast spray from November thru mid April. Color retention demands a cool 60° finish. P
- DOROTHY HYDE  
(9-week response) Oct. 25 - Intermediate semi-incurved disbud. Bright orange-bronze. Greater tolerance to low light and temperature conditions allows it to be flowered several months earlier than Fred Yule in the spring. Buds will initiate and develop at 56° or above. Its dependable and vigorous habit makes for a fine fast disbud from March thru October. Most attractive form and color is retained if cut slightly green. High summer temperatures tend to reduce size. P

- DUCHESS  
(9-week response)  
Nov. 1 (Baumann) - Medium to large bronze spider mum, sometimes called a "Spindle" mum. Duplex form. All petals are straight and tubular. Good flower substance. Maximum growth standards and responsive dependability make this variety an ideal fast disbud from April thru July and mid September thru November. High summer finishing temperatures noticeably dulls color. Duchess along with Luyona, Plum, and John Baumann are beautiful novelties that will contribute to the eventual recognition of the fast disbud as a new mum item. P
- ECHO  
(8-week response)  
Oct. 15 (Y.B.) - Paper-white formal pom of intermediate size. Flowers as early as Blizzard but represents an improvement in whiteness, larger flower, and a vastly superior spray formation. Lateral flowers develop at a smaller angle making the cutting and handling problem relatively easy. Recommended in the greenhouse spray program from May thru October. Satisfactory as an outdoor cut flower for natural flowering. P
- ENSIGN  
(10-week response)  
Nov. 10 (Y.B.) - Intermediate decorative disbud. An ivory-white Bonnaffon seedling of excellent substance with a slight cream center and dimpled petals. Well adapted to either the fast disbud or pot plant programs from April thru December. TALL TREATMENT for pots. Earlier and taller habit than Bonnaffon, but has retained the same beautiful foliage and breaking habit. Useable the year round in high light areas. P
- ERMINE  
(11-week response)  
Nov. 20 (Y.B.) - Intermediate ivory-white disbud. Cream-eyed centers. A winter Iceberg for the fast disbud program from November thru April. Extremely tall on the regular schedule. Should be profitably efficient in any cool sixty environment. P
- ETUDE  
(11-week response)  
Nov. 20 (Y.B.) - Large semi-formal pompon. A rich yellow. Represents continued improvement in productive vigor and late winter and early spring response dependability. Performs well on either the regular or fast spray schedules from March thru May and mid September thru December. Spray is benefited when center bud is removed. Rightfully described as the "Corsair" of the 11-week yellows. Durable for cloth house use. P
- FANFARE  
(10-week response)  
Nov. 14 (Y.B.) - Golden-yellow intermediate anemone for natural spray poms. A late 10-week responding variety that performs amazingly well during the same period that Crescendo is flowered. Spray programs from May thru mid November. Well adapted to cloth house conditions also. Because of extreme inherent vigor, one long day week can be dropped from the 10 week regular schedule. Finishing temperatures less than 60° induces bronze tinges. A fine asset to the list of suitable summer and high temperature flowering poms. P

- FLAME MINSTREL  
(13-week response) Dec. 13 (Delworth) - Intermediate pompon. Reddish-bronze Minstrel selection that most closely resembles Red Minstrel in appearance. This represents richer color, superior response, and vigor over all the bronze Minstrel sports. Spray programs from mid November thru December. P
- FOREVER AMBER  
(12-week response) Nov. 25 (Y.B.) - Intermediate wide petalled decorative disbud. Retains a velvety smooth amber bronze color. A splendid choice for the fast disbud program from mid November thru April. A real stand-out in January and February for the northern environment. Comparatively described as an improved winter Luxury. P
- GILTGLOW  
(10-week response) Nov. 10 (Y.B.) - Intermediate bi-colored single. An expressive reddish-bronze contrasted with a smart green disc. Gold reverse. Slow disc development and fine color retention add up to excellent keeping qualities either on the bench or when cut. Medium to short growth habit. Recommended for the regular spray program from mid April thru June and mid September thru November. Some foliar mottling can be induced if flowered when very high summer greenhouse temperatures prevail. This will introduce a striking new color version not presently in the commercial pompon trade. P
- GLAMOUR  
(9-week response) Nov. 1 (Y.B.) - A formal pom disbud of intermediate size. Lavender pink with intensified centers. Spreading and stocky growth habit render it useful primarily as a pot plant variety from March thru November. MEDIUM TREATMENT. Improves the breaking habit of Portrait and the stem strength of Blue Ribbon. The colorful tone on tone contrast lends glamour to its appeal. P
- GOLDEN SHOESMITH  
(10-week response) Nov. 12 - Large incurved yellow standard. Intensified color sport of Yellow Fred Shoesmith. Useful for the same periods as parent variety. Regular standard programs and pots from mid March thru June and mid October thru December. P
- HANDSOME  
(9-week response) Nov. 1 (Y.B.) - Intermediate decorative pom. Lavender pink. Color, size, and form bear a striking resemblance to Bluechip. Slightly larger and more closely internoded foliage lends it to pot plants the year round. TALL TREATMENT. Superb natural spray cut pom from mid April thru mid November. Is inherently as low temperature tolerant as Bluechip, 52° minimum, for bud initiation. Produces slightly smaller flowers but more of them. A highly versatile pompon. P
- ILLINI BONBON  
(11-week response) Nov. 18 (Univ. of Illinois) - Very small dark yellow anemone. Short growth habit. Dainty individual flowers develop perfect well-rounded cushions and are borne in massive clusters on short natural sprays. Exclusively for pots from March thru June and October thru December. MEDIUM or TALL TREATMENT. High temperatures stall flower development. Will merit attention for its massive display of dainty and individually perfect anemone flowers. P

- INCURV. DELAWARE  
(10-week response) Nov. 8 (Ulery) - Large standard. Tightly incurved form mutation from Delaware. Quite different in appearance from parent variety in that it holds its form and conceals the open center well past maturity. Since only reverse petal color is shown, over-all color is more bronze, less red than a reflexed Delaware. Form provides greater substance. Recommended for pots the year round using SHORT TREATMENT. Becomes slightly shorter and flowers 3-4 days later than parent during the marginally low light intensity periods of mid winter. P
- JOHN BAUMANN  
(11-week response) Nov. 20 (Baumann) - Large paper-white spider. Duplex form. Partially spooned petals. A novel and efficient retailers item best grown in a fast disbud program from October thru May. An exceptionally fine winter performer in the north. Considered faster and much more reliable than Illini Starflower during the spring months. P
- LARRY  
(7-week response) Oct. 1 - Intermediate paper-white pompon. Compact short habit defines its place as a high quality pot variety suitable for May and June and again in October using MEDIUM TREATMENT. Flowers with Chris. Columbus. Satisfactory as a natural spray in pots. Disbudding substantially increases flower size as well as improving flower substance. Not troubled by pink tinges at temperatures less than 60°. This is tops among the 7-week whites for pots. S-1
- LIPSTICK  
(7-week response) Oct. 5 - Small burgundy red cushion pom. Dwarf spreading habit coupled with free breaking action add up to a reliable May and June pot plant as well as in October. SHORT TREATMENT recommended. Very shapely and colorful if finished at 60° or less. A fine prolific garden variety. S-1
- LUMINARY  
(10-week response) Nov. 5 (Y.B.) - Intermediate yellow disbud. Decorative form. A Bonnaffon seedling that performs at its best in pots during the warm periods of the year from mid June thru October. MEDIUM TREATMENT. Extremely vegetative and non-responsive during winter and early spring in the north. Same spreading habit as parent. When Bonnaffon DeLuxe stalls in the summer, switch to Luminary. P
- MERMAID  
(10-week response) Nov. 5 (Y.B.) - Intermediate pompon disbud. Medium lavender pink with an intense tone on tone center contrast. A dwarf version of Portrait with decidedly better breaking action and spreading habit. Unfailing as a year round pot variety using SHORT TREATMENT. High temperature color retention equals that of Blue Ribbon. Fine foliage with smart, formal form. P
- MOONTIDE  
(9-week response) Oct. 28 (Y.B.) - Medium to small ivory-white standard. Develops into a tightly incurved ball form. More accurately defined in appearance as an over-sized Luna flower. Fast growing variety. Highly recommended as a fast disbud from March thru December. Withstands minimum of 56° in the spring for bud initiation. P

- NORTHWIND  
(13-week response) Dec. 8 (Y.B.) - Medium to large pure white single. Represents a decided improvement in vigor and productive capacity among the presently available white singles for winter production in the north. Durable flowers enable it to be shipped without difficulty. Extremely reliable in cool 60° program. Useful in the regular greenhouse spray program from December thru February. P
- PATTERSON'S WHITE  
(9-week response) Nov. 1 (Patterson) - A mutation from imported stock of Wilson's Yellow. This new selection possesses a markedly improved form and size over Wilson's White. It is a deep, well-rounded incurve, pure white with better substance. It is claimed to be much more resistant to blacking of centers thru the fall, winter, and spring months. It retains or even improves all the good pot growth habits of Wilson's White. Its beautiful form and improved durability rate it close to the top for year round white pot plants. P
- PINK DELUXE  
(10-week response) Nov. 10 (Y.B.) - Medium to large lavender pink disbud. A significant achievement in the development of flower size within the pinks available for pots. Four to five inch decorative type flowers are produced on a Bonnaffon type chassis. Heavy stems, short internodes, with free and wide-angled breaking action. Can be efficiently flowered in pots 12 months of the year with either MEDIUM or TALL TREATMENT. Color is best preserved during the summer months when developing flowers are given some shade protection. A variety for those who seek the best. P
- PLUM  
(10-week response) Nov. 10 (Baumann) - Large silvery lavender duplex spider. Petal completely tubular and partially incurved. A close counterpart to the old Vivacious Lady. Equal to the flawless dependability and superb growth habit of Luyona in a year-round fast disbud program. This is another salient contribution to enlarge the range of variety for disbuds. P
- PROFILE  
(10-week response) Nov. 8 (Y.B.) - Large pompon. Another distinctive color variation to add to the increasing number of beautiful Portrait sports. A lively pink shade between that of Portrait and Dark Portrait. Form is more decorative. Growth, vigor and breaking habits are as good if not better than Portrait. Recommended for pots and spray programs from March thru December. Summer color is best with some shade protection, but when finished cool, maximum color expression is dazzling among the Portraits. P
- RED EMPRESS  
(12-week response) Dec. 1 (Y.B.) - Large disbud anemone. A mauve-red sport of Empress. An essentially fine and appealing fast disbud from November thru April. P

RESOLUTE

(8-week response)

Oct. 24 (DePetrís) - A large reddish-bronze semi-incurved pompon. Fully petalled. Bright red when finished cool and a smooth orange-yellow when finished warm. Strong, rigid growth habit. Versatile for pots MEDIUM TREATMENT, fast disbuds, and regular spray programs from April thru October. Resolute along with Bayonne, qualify for top billing for Mother's Day and early spring flowering pots. Should make a durable outdoor natural cut flower variety in the Southern States. P

SNOWCLAD

(9-week response)

Nov. 1 (Y.B.) - Medium, paper-white disbud. Semi-short, stocky habit will provide a grower with a "never-fail" white pot mum the year round. MEDIUM TREATMENT. Flowers a week earlier than either Chalk Cliff or Oregon and develops superb quality during the winter months when Wilson's White is questionably soft. Heavily petalled flowers contribute to a relatively long period of freshness. Bud initiation will take place in temperatures as low as 52°. Has class, substance, and is tolerant to high temperatures. Of Portrait size, it rates with the best. A pure white Criterion. P

SNOW CRYSTAL

(10-week response)

Nov. 5 (Y.B.) - Medium to large ivory white spider disbud. Fully double form. Feathery spooned petals. Captures much of the delicate Snowdrift form from which it was bred. Strong habit, and wiry stems make it an exclusively novel pot variety useable the year round. Best with TALL TREATMENT. Easily averages five uniform breaks from a soft pinch. Tolerant to wide ranges of temperature for initiation and development. A variety that will create interest. P

SNOWSTORM

(13-week response)

Dec. 5 (Y.B.) - A white decorative pom of medium size. Represents continued advancement to improve quality, productiveness and low temperature tolerance for northern winter pom programs. Specifically recommended in greenhouse spray programs from December thru mid March. Flower size benefited materially when partially dissprayed. Snowstorm's improved traits and ease of flowering will commence to decrease the popularity of Silversmith. Fully tolerant to cool 60° environment. P

SOUTHDOWN PINK

(10-week response)

Nov. 5 - Intermediate duplex disbud of Valencia size and form. Delicately shaded pink close to a true light pink carnation. Complimented with green disc centers. Wide, waxy petals. An accepted variety in Europe possessing all the needed traits for a rewarding product in the fast disbud program from October thru mid June. Tolerates 56° minimum temperatures. Develops equally as well during the summer periods but 60° or lower is required for best color expression. P

- STACCATO  
(11-week response) Nov. 20 (Y.B.) - Intermediate formal pom. Lavender pink. Much like an 11-week Minstrel in form, but reliably responsive all through the winter from October thru April in the regular spray program. Tolerates 56° minimum. Flower durability lends itself well to cloth-house use. Color brightness best retained at night temperatures of 60° or below. A productive and profitable addition to the presently small group of popular 11-week pinks. P
- STARDUST  
(10-week response) Nov. 12 (Y.B.) - Formal white pom of intermediate size. Establishes a larger and more shapely Keepsake form. Its smart formal form has strong consumer appeal. Productive and dependable from April thru November in both regular and fast spray programs in either green-house or cloth-house. A clean vigorous habit that rarely overcrops or delays. Tolerates 56° minimum. P
- STUART OGG  
(9-week response) Oct. 25 - Intermediate decorative disbud. A luminous apricot pastel rarely found in the chrysanthemum color range. Becomes radiantly alive under the spectrum of incandescent lights. An English development that grows and develops into superb fast disbuds from April thru June and again from September thru mid November. High summer-finishing temperatures affect color loss and form distortion due to some reflexing of petals. Also, rapid rate of flower development necessitates cutting early while centers are still tight. P
- SUNFIRE  
(10-week response) Nov. 5 (Y.B.) - Medium to large single. Dark yellow. Wide horizontally flat petals are well extended and become partially tubed at their base. Retains its complimentary green-eyed disc for long periods which thusly contributes to its zestful appearance. Flowers are borne on clean, well-balanced terminal sprays coupled with rigid stemmed growth. A top performer in either fast or regular spray programs from May thru mid November. The combination of Sunfire's improved traits enables it to compete favorably with the present varieties of Happiness, Sauterne, and Aztec. P
- SURFSIDE  
(11-week response) Nov. 23 (Y.B.) - Large single. A clear white. Extra wide petals and green discs. Petallage has substantially more substance than found in either Illini Alba or Sculpture. The added vigor incorporated in this 11-week seedling makes it a splendid copartner to such varieties as Jubilation, Crackerjack and the Galaxies to be flowered in spray programs from November thru March. Tolerates 56° minimum. Best grown disspray. P

- THEMESONG  
(9-week response) Nov. 1 (Y.B.) - Medium semi-incurved white standard. Possesses Good News petallage and durability. Adapted especially for summer and high light intensity periods. Sufficiently versatile to fit standard, fast disbud, and pot programs from June thru mid November. TALL TREATMENT for pots. Non-restricted development and resistance to burning during the summer months. Vigor often surpasses that of Good News in mid summer. P
- THISTLEDOWN  
(9-week response) Nov. 1 (Wash. State College ) - Medium to small novel white decorative pompon. An improved Snowdrift flower. Provides a more fully double form of feathery serrated petals in addition to being a more clear white color. Also wider sprays. Natural spray programs from May thru October. Becomes too tall for pot plant use. Faster, whiter Illini Snowdrift. P
- TOPFLIGHT  
(8-week response) Oct. 20 (Y.B.) - Medium to small bright yellow anemone. Flowers are borne in abundant masses on both terminal and compound sprays, each floret displaying well-defined cushions without reflexing ray petals. Very productive growth performs advantageously in regular and fast spray programs from May thru October. Durability adapts it well to cloth-house use. Tolerates 52° bud initiation temperatures and high summer temperatures for development. A needed supplement in the present shortage of 8-week yellow poms for cut flower use. P
- VEDOVA  
(11-week response) Nov. 15 (DePetris) - Extra large Valencia size, anemone disbud. Pastel shade of a lustrous lavender pink with small green-tipped cushions. Color is best expressed in a cool 60° environment. The performance, beauty, and quality of this variety establishes a new precedence from October thru May flowering periods either as a fast or regular disbud, or a pot variety using TALL TREATMENT. The combination of breaking action, rigid stems, attractive foliage, and sizeable flowers far exceeds the potential that Beautiful Lady can provide. P
- VENOYA  
(11-week response) Nov. 22 (DePetris) - Extra large lavender-pink anemone disbud. Strikingly similar in growth to Vedova, Venoya flower develops a substantially larger green-eyed cushion with greater depth, in addition to flowering 5 to 7 days later. It is equally as versatile and outstanding. Fast and regular disbud programs, and pot plant programs using TALL TREATMENT from October thru May. Color retention on Venoya too, requires cool 60° finishes. The year-round pot plant grower will find that both Vedova and Venoya well surpass the product standards that they are now accustomed to producing during the mid winter months. P

- WAGONWHEELS  
(9-week response)  
Oct. 25 (Y.B.) - Intermediate anemone. Silvery-coral reverse color as displayed by all completely tubular petals. A novel form representing a spoked wheel in appearance. Vigorous growth habit develops tall plants abundantly supplied with spray masses of perfect florets. Provides a uniquely different cut flower pom in both fast and regular spray programs from April thru October. Color is best expressed in cool finishing temperatures. Suitable outdoor cut flower in the fall for either shaded or natural flowering. P
- YEL. ALBATROSS  
(9-week response)  
Nov. 1 - Large incurve. Lemon-yellow sport of Albatross. Primarily a West Coast variety possessing better than average shipping qualities. Suitable for mid September thru mid November standard programs. Price Class. S-1
- YEL. SHOESMITH  
(10-week response)  
Nov. 12 - Large yellow incurve. Richly colored sport of Fred Shoemsmith. Identical in most respects to parent. Slightly tighter form incurvature and less lower petal reflex. The Shoemsmiths are lending new hope to larger and better greenhouse standards for the mid March thru June and mid October thru December flowering periods. Fine for pots during the same period using TALL TREATMENT. Cool finishing temperatures are favorable to the most rapid flower development for the Shoemsmiths. P
- YEL. MARBLEHEAD  
(9-week response)  
Oct. 25 (Rosacker) - Medium lemon-yellow incurve. Sport of Marblehead. Recommended for standard and fast disbud programs from May thru October. The Marbleheads require the high light, high temperature combination to achieve maximum stretch and flower size. Price Class. P
- YEL. ILL. SNOWDRIFT  
(10-week response)  
Nov. 12 (Weigold) - Small novelty decorative. Intense yellow sport of Illini Snowdrift. Similar to original. Petals are narrower, and more finely feathered. Slightly less vigorous during marginal light periods, but equally as good during its recommended period. Natural greenhouse spray program from mid April thru mid November. Natural spray, pinched pots for the same period using TALL TREATMENT. It's cute! It's different! P
- YELLOW TAFFETA  
(11-week response)  
Nov. 15 (Coward) - Intermediate lemon-yellow sport from Taffeta. Depth of color varies slightly with light intensity. Maximum color is expressed in late fall and early spring flowering. A variety worthy of consideration as an addition to the rest of the Taffeta group when flowering in greenhouse spray programs from March thru May and from mid September thru November. P
- YELLOW WAIKIKI  
(10-week response)  
Nov. 13 - Large spider. Clear lemon-yellow sport from Waikiki. Similar in habit. Splendid in either the regular or fast disbud programs in the fall, October thru mid November. S-1

# SPRAYS - REGULAR SCHEDULE

Variety	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<u>WHITE</u>												
Echo (8)					x x	x x	x x	x x	x x	x x		
Crystallite (9)					x x	x x	x x	x x	x x	x x	x	
Thistledown (9)					x x	x x	x x	x x	x x	x x		
Stardust (10)				x x	x x	x x	x x	x x	x x	x x	x x	
Surfside (11)	x x	x x	x x								x x	x x
Northwind (13)	x x	x x										x x
Snowstorm (13)	x x	x x	x									x x

## YELLOW

Topflight (8)					x x	x x	x x	x x	x x	x x		
Brilliancy (9)					x x	x x	x x	x x	x x	x x	x	
Sunfire (10)					x x	x x	x x	x x	x x	x x	x	
Yel. Ill. Snowdrift (10)				x	x x	x x	x x	x x	x x	x x	x	
Fanfare (10)					x x	x x	x x	x x	x x	x x	x	
Etude (11)			x x	x x	x x				x	x x	x x	x x
Yellow Taffeta (11)			x x	x x	x x				x	x x	x x	

## BRONZE & RED

Resolute (8)				x x	x x	x x	x x	x x	x x	x x		
Wagonwheels (9)				x x	x x	x x	x x	x x	x x	x x		
Peach Chip (9)					x x	x x			x	x x	x	
Bronze Portrait (10)			x x	x x	x x	x			x	x x	x	
Giltglow (10)				x	x x	x x			x	x x	x x	
Br. Jubilation (11)	x x	x x	x x	x x	x					x x	x x	x x
Flame Minstrel (13)											x	x x

## PINK

Darkchip (9)					x x	x x	x x	x x	x x	x x	x	
Handsome (9)				x	x x	x x	x x	x x	x x	x x	x	
Profile (10)			x x	x x	x x	x x	x x	x x	x x	x x	x x	x x
Cheerful (10)				x	x x	x x	x x	x x	x x	x x	x x	x
Celebrity (11)	x x	x x	x x	x						x	x x	x x
Staccato (11)	x x	x x	x x	x x						x x	x x	x x

## FAST DISBUDS AND FAST SPRAYS. - FAST SCHEDULE

[illegible]

# POTS

Variety	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<u>WHITE</u>												
* Larry (7)					mm	mm				mm		
Patterson's White (9)	ss	ss	ss	ss	ss	ss	ss	ss	ss	ss	ss	ss
Crest (9)			m	mm	mm	mm	mm	mm	mm	mm	m	
Snowclad (9)	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
Thamesong (9)						t t	t t	t t	t t	t t	t	
Chalk Cliff (10)	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
Ensign (10)				t t	t t	t t	t t	t t	t t	t t	t t	t t
Snow Crystal (10)	t t	t t	t t	t t	t t	t t	t t	t t	t t	t t	t t	t t

## YELLOW

Luminary (10)						m	mm	mm	mm	mm		
Golden Shoemith (10)			t	t t	t t	t t				t	t t	t t
Yel. Shoemith (10)			t	t t	t t	t t				t	t t	t t
*Yel. Ill. Snowdrift (10)				t	t t	t t	t t	t t	t t	t t	t	
*Illini Bonbon (11)			t t	t t	t t	t t				t t	t t	t t

## BRONZE & RED

*Lipstick (7)					ss	ss				ss		
Bayonne (8)				ss	ss	ss	ss	ss	ss	ss		
Resolute (8)				mm	mm	mm	mm	mm	mm	mm		
Andante (9)				m	mm	mm	mm	mm	mm	mm		
Incurv. Delaware (10)	ss	ss	ss	ss	ss	ss	ss	ss	ss	ss	ss	ss
Bronze Portrait (10)	mm	mm	t t	t t	t t				m	mm	mm	mm

## PINK

*Candytuft (8)					mm	mm				mm		
Glamour (9)				mm	mm	mm	mm	mm	mm	mm	mm	
Handsome (9)	t t	t t	t t	t t	t t	t t	t t	t t	t t	t t	t t	t t
Mermaid (10)	ss	ss	ss	ss	ss	ss	ss	ss	ss	ss	ss	ss
Pink Deluxe (10)	t t	t t	t t	t t	t t	t t	t t	t t	t t	t t	t t	t t
Profile (10)			t t	t t	t t	t t	mm	mm	mm	mm	mm	mm
Vedova (11)	t t	t t	t t	t t	t t					t t	t t	t t
Venoya (11)	t t	t t	t t	t t	t t					t t	t t	t t

\* Suggest sprays with center bud removal.

# STANDARDS AND DISBUDS. - REGULAR SCHEDULE

Variety	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<u>WHITE</u>												
Themesong (9)						xx	xx	xx	xx	xx	x	
<u>YELLOW</u>												
Yel. Marblehead (9)					xx	xx	xx	xx	xx	xx		
Brighton Yellow (9)				x	xx	xx						
Yel. Albatross (9)									x	xx	x	
Golden Shoemith (10)			x	xx	xx	xx				x	xx	xx
Yellow Shoemith (10)			x	xx	xx	xx				x	xx	xx
Yellow Waikiki (10)										xx	x	
<u>PINK</u>												
Bunbu (9)				xx	xx	xx	xx	xx	xx	xx	xx	
Vedova (11)	xx	xx	xx	xx	xx					xx	xx	xx
Venoya (11)	xx	xx	xx	xx	xx					xx	xx	xx

### SOME OBSERVATIONS AND COMMENTS ON POT PLANTS

Some customers have reported that the variety Oregon during January and February has not come up to early claims. Soft flowers turning into darkened centered blooms in retail shops are the major complaint. Minor reports of botrytis sensitivity have been received from areas of high relative humidity.

The cause is primarily overcropping. Short treatment has been and still is recommended. Medium treatment often produces a plant too small to support Oregon's large flowers. High (65°) temperatures frequently required by Bonn. Deluxe are often excessive under winter conditions, for Oregon. The variety should always be disbudded and the earlier the better. Single pinching on large varieties such as Oregon is still the best bet. Low relative humidity (using good ventilation practices) coupled with cool finishing temperatures (55°) always contribute to quality improvement. Again clean glass and good light conditions are important especially so under the limited light conditions of mid winter. Overcrowding, with inadequate and late spacing should be avoided.

Selling plants with flowers still very green or immature is not a good practice for it may lead to an early condemnation of a pot mum variety that could very well be avoided if the grower would bring the plants to a semi-mature stage of development before releasing for retail sales. Actually a flower that has almost reached its full stage of development will provide more lasting pleasure and durability in a normal home environment than would green-immature buds under the same conditions.

Here is a suggestion for producing fully double flowers on Delaware and Yellow Delaware. While our experience to date is limited to one March series it surely works, is easy and looks very promising. For winter our regular Delaware schedule calls for three (3) weeks of lights to the pinch plus one (1) week of light to final shade. This is the normal abrupt shade, short treatment. To produce double flowers plant and light for 3 weeks (21 long days), pinch and then follow with 2 weeks of shade (14 short days) then light for 1 week (7 long days) and give final shade. This 14-7 interrupted light treatment will provide the same number of long days as the abrupt shade treatment and the crop will mature about 1 week earlier than the regular treatment with just about the same height of plant. Temperature maintenance at 60° minimums for the crop duration up to visible buds is very important. Sharp response is closely correlated to correct temperature control. The flowers are very nearly double.

We are often asked for improved methods of growing good pots of the Indianapolis varieties. Repeated tests here sustain the accepted practice of many Texas growers. The procedure is to plant, start short days immediately and tip pinch three (3) weeks later. The plant is 6"-8" above the rim level after three weeks time. Since it is well established it produces the maximum number of strong breaks. These breaks are relatively short, five to seven inches, that nest themselves in large basal foliage that adds spread and results in a shapely, balanced pot. The soft pinch made on a plant that has been grown for three weeks from the time of potting will produce noticeably larger basal foliage than a plant that was soft pinched at the time of planting or a plant pinched one week after planting. Leggy plants are the result of pinching Indianapolis prior to or close to the shade date.

Increasing interest in 3" and 4" pots for spring bedding plant sales, year round retail shops, and super market sales raised a question on timing. Our present pot plant schedules were established for five and six inch pots. For best proportions the small pot should be shorter and should receive seven less long days than is presently recommended for a 5" or 6" pot at the same time.

This implies that all varieties classed as "tall" should not be used in small pots for they do not fit the minimum schedule. They will be too tall regardless of the treatment applied. Only the "medium" and "short" varieties lend themselves well to small pot culture. A minimum of one week from plant to pinch is essential. In small pots a "medium" variety would be planted, given short days immediately and pinched seven days later. A "short" variety would be planted, given seven long days, pinched and short days started simultaneously. This is late spring, summer and early fall timing. Adjustments should be made in a similar manner for other periods.

Plunging small pots in soil or peat up to the bottom of the pot rim at planting time works well. Very few roots penetrate through the drainage hole. Roots will confine themselves within the pot area provided it is kept uniformly moist throughout the growth period. If pots are not plunged deep enough to allow capillary water to keep all of the root ball moist, the lower roots will then go in search of water and develop extensive roots out beyond the confines of the pot.

Producing single stem pots of large flowered varieties like Oregon, Delaware and the Calypsos can profitably be recommended in small pots. Average diameter usually runs 5-6". The procedure is to plant and start short days immediately. The growing time is then equal to the response of the variety. Early disbudding is a must.

This item is very attractive and normally good, large foliage is produced right up to the flower. The Indianapolis varieties can be used in the same way only in larger size pots because of their taller habit.

For top quality pot specimens, foliage should rarely overlap from one pot to another during the growing period. For a six inch pot, a maximum of 1 1/4 sq. ft. or 196 sq. inches of bench area is generally needed to finish each pot. Five inch pots require 120 sq. inches; four inch pots, 64 sq. inches or 2 1/4 pots per sq. ft.; three inch pots, 25 sq. inches or 5-6 pots per sq. ft.

### ON WINTER SPRAYS AND STANDARDS

We continue to observe much maltreatment of winter crops from the temperature, relative humidity and ventilation standpoint.

For inter-connected units or crops at different stages of development the most efficient and effective temperature recommendations we can make are cool 60° crops. The house temperature is run at a straight 60° level night and day, cloudy or sunny. This is the lowest, safest, minimum. It is the night temperature that counts. Eliminating fluctuation promotes steady, gradual growth. Keeping day temperatures down encourages more ventilation with corresponding reduction in relative humidity. This promotes stronger, heavier stems. On very bright days temperatures will frequently go higher but this should be due to radiant heat from the sun rather than convective greenhouse heat.

This cooler average temperature cuts costs and exploits the lower temperature tolerance being bred into some of the newer, 11 through 14 week varieties. Acclaims, Icecap, Illini Cascade, Sculpture, Illini Alba, Coronation, Dark Yellow Satellite, Esquire, Souvenir, Yellow Galaxy, Lollipop, Illini Brighteyes, Alvoda, Delmar, Jubilation, Magic, Thelma, Crackerjack and Galaxy all take the procedure well. Corsair and Sun Valley in late January and February programs are excellent only if a higher 63° minimum or initiation at 65° is maintained.

Two new 14-week varieties Elegance and Golden Elegance are outstanding in their natural December 20th season. However they fail to elongate sufficiently in January and February and are too short. They are responsive and tolerate cool 60° temperatures well, but they require two additional long day weeks over the 14-week schedule to obtain sufficient stem length in January and February. Consequently they are considered inefficient for those periods.

The new varieties, Icecap (13-week white pom) and Coronation (13-week yellow dec.), have proven to be very productive and dependable sprays with cool 60° treatment for January and February.

All the Indianapolis varieties plus Mefo's and Queen's give very good results.

Indianapolis varieties given the cool 60° treatment plus interrupted light (9-12) provide high quality winter standards.

The problem of winter quilling in Indianapolis is now better understood. With winter light conditions the lower the finishing temperatures, the greater the incidence of quilling. While scattered cases have reported no petal increase with the use of interrupted light, the general comment has been favorable. We know that accurate temperature control plus a good all round job of growing consistently results in success. In any case 9-12 interruption on standards does no harm. Continued use of it for winter standards is recommended.

If reliability, size, petallage, and form retention are needed traits to earn the most dollars per unit area for the northern grower, Mefo's still rate close to or at the top of the winter list. Queen's with abrupt shade, frequently show much open center. They can be improved, and are markedly benefitted by interrupted light.

We repeat, the Improved Ind. White provides a form improvement on Ind. White during the winter and early spring period. Meaning, there is no increase in diameter, but a retention of the normal incurved form with no quilling. Under conditions of high 60° flowering in winter (some growers are running 63°-65° winter crops) the Imp. Ind. White will blow open more rapidly and is not as desirable as the regular Ind. White. Under normal conditions of 60° and especially where Ind. is finished cool, the Imp. Ind. White provides the best variety for depth, incurvature and color clarity.

Lots of interest is brewing over the new European import Fred Shoemith. True, it is superlative in its right period but it is far from being fool-proof throughout the year.

In our late January-February 60° units we found the stems to be quite weak and not saleable. In the same period finished at 50° the stems were very satisfactory. For our latitude it requires 10 week timing and cannot be crowded. Spacings of 6" X 6" for single stem or 8" X 8" retaining two stems are close to minimum in winter.

The best periods for Fred Shoemith are mid October (prepare to protect it if it is hot) through December and mid March through June. These are the periods when temperatures allow for a relatively slow, cool finish. The cooler finish permits the development of a tightly incurved form. Higher finishing temperatures produce some degree of lower petal reflex. It is a very slow 10 week or early 11 week response. We list it as a 10 because 10 week timing is normally required to obtain sufficient stem. It should be good in air cooled summer greenhouses but is as sensitive to burning and botrytis petal blight during high temperature as Indianapolis White. In the South, under higher, light conditions it should be fine in January-February. Here, at that time, it does require a 50° finish. It does not pink or quill.

Balcombe Perfection and Red Balcombe Perfection, 11 week bronze and red standards, achieve maximum size and perfection only in late fall when finished cool. They are therefore recommended from mid October through December. The Balcombe's are very short, heavy growing varieties and require two additional long day weeks to achieve sufficient stem length

They are quite vegetative and uneven in response during northern winters. High temperatures of spring and summer distort form and causes rapid color loss.

Given time and space they can produce a caliber of form and color not yet equalled by any other presently available red standards.

Good winter crops in the North continue to stress and give very close attention to these three basic requirements:

(1) Temperature and ventilation. Too low is just as fatal as too high. The cool 60° recommendation is best suited to a wide range of latitudes and light conditions. Closed, humid houses make for soft spindly growth. Good ventilation is a must to reduce relative humidity and pays significant dividends when correctly handled.

(2) Soil and its treatment. Open, well drained soil can never be over emphasized. When light is a limiting factor the chrysanthemum plant is much more sensitive to overwatering and to soluble salt content than at any other period of the year. We continue to see marked improvement and benefits when sterilization is arranged to just precede the plantings for winter crops. Additions of peat should be made gradually with the precaution of thorough soaking prior to planting. Particles of dry peat within the body of the planting soil frequently do much damage to roots.

(3) Spacing. While closely correlated to the available light conditions, the general single stem recommendations for northern growers are:

4" X 6" or 5" X 5"	May to mid October flowering.
5" X 6"	Mid October-November, March-April
6" X 6"	December, January, February

With only slight modifications all growers face correct solutions to the above problems. The difference between a job well done and a near miss frequently is the result of a salesman's correct suggestions and the ability of the grower to use and combine them with his own know-how. More and more salesmen are realizing how valuable it is to have the correct suggestion at the right time and be able to diplomatically get the idea across.

